

Abstract of the disclosure

The Invention relates to method as well as a sensor device with a sensor element for detection of gases and vapors in air. The sensor element is preferably a heated metal oxide sensor with heating structure and gas sensitive layer, wherein the temperature of the gas sensitive layer can be maintained constant by way of a heating structure and an automatic control device. The sensor element is disposed in a heat in a preferably heat insulating casing for protecting against air flows, wherein the gas can penetrate into the casing through a gas permeable diffusion layer. The resistance of the heating structure, which is a measure for the temperature of the gas sensitive layer, is employed as a temperature reference for the automatic control according to the present Invention method.